



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,733	04/12/2005	Chio Ishihara	123337	1895
25944	7590	03/21/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			SHEEHAN, JOHN P	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/529,733

Applicant(s)

ISHIHARA ET AL.

Examiner

John P. Sheehan

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>June 30, 2005</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3 to 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Document No. 2002-280209 (Japan '209, cited in the IDS submitted June 30, 2005).

Note: All references to Japan '209 are based on the machine translation submitted with the IDS of June 30, 2005.

Japan '209 teaches a method of making a powdered core comprising mixing a soft magnetic powder with a resin powder wherein the resin powder has a mean particle size of 30 microns or less (Abstract). The resin particle size taught by Japan '209 is encompassed by the resin particle size recited in the instant claims. Japan '209 teaches that the resin powder is added in an amount of 0.5 to 5% (claim 5 and page 2,

Art Unit: 1742

paragraph 0012) which overlaps the amount of resin powder recited in the instant claims. Japan '209 teaches that the alloy powder and resin powder are mixed, compacted to form a green compacted and the green compact is heated as recited in the instant claims (page 5, paragraphs 0034 to 0036). Thus, Japan '209 teaches the same process steps as recited in the instant claims and a resin particle size that is encompassed by the instant claims and a resin content that overlaps the resin content recited in the instant claims.

The claims and Japan '209 differ in that Japan '209 does not teach the exact same resin powder content as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the resin content of the claims and Japan '209 overlap, such an overlap establishes a prima facie case of obviousness, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

4. Claims 8 to 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '209 in view of the admitted known prior art discussed in paragraph 0008 the applicants' specification .

Japan '209 teaches and is applied as set forth above. Japan '209 additionally teaches that the alloy powder can be coated with an insulating layer such as a phosphate compound (page 2, paragraph 0015) as recited in claim 8. Japan '209 also

Art Unit: 1742

teaches a compaction pressure that overlaps the compaction pressure recited in the instant claims 8 to 10 (page 5, paragraph 0034). Japan '209 teaches that a lubricant can be added to the inner surface of the compacting die assembly as recited in claim 9 (page 2, paragraph 0012 and page 5, paragraph 0033).

In paragraph 0008 of the instant specification, applicants disclose that it is conventional to machine a dust core to its final configuration.

The claims and Japan '209 differ in that Japan '209 is silent with respect to machining the dust core to its final configuration.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because machining a dust core to its final configuration is a conventional process step that one would expect to occur in Japan '209's process.

5. Claims 1 to 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iyoda et al. (Iyoda, US Patent Application Publication No. 2003/0127157 A1, cited by the Examiner in this Office Action).

Iyoda teaches the process steps recited in applicants' claims (paragraphs 0012 to 0016), using a mixture of a polyamide resin and a thermoplastic resin (paragraph 0011 and 0039) as recited in claims 2 to 7. Iyoda teaches that the resin mixture should have a particle size of less than 200 microns with a most preferred particle size of less than 50 microns as (paragraph 0037) as recited in the instant claims.

The claims and lyoda differ in that lyoda does not teach the exact same resin powder particle size as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the resin particle size of the claims and lyoda overlap, such an overlap establishes a prima facie case of obviousness, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05. This is felt to be particularly true in this situation wherein lyoda's most preferred resin particle size (page 4, left column, lines 2 and 3) is the same as the resin particle size recited in the instant claims.

6. Claims 8 to 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over lyoda in view of the admitted known prior art discussed in paragraph 0008 the applicants' specification .

lyoda teaches and is applied as set forth above. lyoda additionally teaches that the alloy powder can be coated with an insulating layer such as a phosphate compound (page 3, paragraph 0033) as recited in claim 8. lyoda also teaches a compaction pressure that overlaps the compaction pressure recited in the instant claims 8 to 10 (page 4, paragraph 0040). lyoda teaches that a lubricant can be added to the inner surface of the compacting die assembly as recited in claim 9 (page 9, paragraph 0072).

In paragraph 0008 of the instant specification, applicants disclose that it is conventional to machine a dust core to its final configuration.

The claims and lyoda differ in that lyoda is silent with respect to machining the dust core to its final configuration.


However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because machining a dust core to its final configuration is a conventional process step that one would expect to occur in lyoda's process.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742